Reviewer's report

Title: Sociodemographic and socioeconomic differences in sleep duration and insomnia-related symptoms in Finnish adults

Version: 1 Date: 5 May 2012

Reviewer: Michael Grandner

Reviewer's report:

Major Compulsory Revisions

1. The specific item that assessed insomnia need to be spelled out. As written, the paper describes it only broadly. I can't tell how well it approximates insomnia.

2. The discussion of demographics does not include race/ethnicity or immigration status. Some justification is required as most studies of social determinants of health mention at least one of these.

3. The Discussion mentions the importance of income and education as important determinants of sleep. More discussion should be provided as to why. Obviously, these would work through other forces (one cannot buy sleep). For example, what does income buy that gives better sleep? How does increased education lead to better sleep? What would happen to these associations when some of these variables could be measured and included in these model

Minor Essential Revisions

1. Why are married and cohabiting groups joined? Several studies have shown that these are different groups, at least in the US.

2. How was education level of parents assessed?

3. How was health status assessed?

4. Tables 1a and 1b should include p values for one-way ANOVA or chi-square for univariate tests across sleep duration and insomnia categories for all variables.

5. More discussion is necessary about how very few relationships were maintained in Model 4, or even Model 3.

6. The authors find little to no effect of having small children. Perhaps the age range is too inclusive (maybe older children are not as much as a burden as infants). Also, maybe household size as a continuous variable would be more useful.

7. Regarding limitations, the authors should note that the items used are not validated measures of sleep duration or insomnia.
Discretionary Revisions

1. The authors should consider re-analyzing data with <5 hours separate from 5 hours, unless there is not enough statistical power to do this. Recent findings are showing that the <5 hour group, at least in the US, is fundamentally different from the 5 and 6 hour groups. If there is sufficient power to do this, this change may strengthen the results.

2. Rather than include gender as a covariate, the authors may wish to test interactions with gender. If significant, they may wish to stratify. If the story is markedly different for men and women, the current analyses may miss it.

3. A recent paper by Tomfohr and colleagues on polysomnographic sleep relative to parental education would be germane to the Discussion section that deals with this finding.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests